



The F-15 was shipped in on three flatbed trucks from Rickenbacker Air National Guard Base near Columbus, Ohio and was re-assembled by a team from Warner-Robins Air Logistics Center at Robins AFB, Ga. (Photo by Joel Fortner)



Two team members work from the top of the aircraft as four of the crew work to align the aircraft's right wing from underneath. According to crew member Tech. Sgt. Aaron Robinson, the F-15 is not as complicated to re-assemble for static display as the B-52 Stratofortress, due to its size and the amount of metal the aircraft contains. (Photo by Joel Fortner)

F-15 slated for public display at main gate

By Joel Fortner
AEDC Public Affairs

AEDC recently welcomed the arrival of its third static display aircraft, an F-15 Eagle, a flight system that began testing at the center in 1969.

This particular F-15 was shipped in from Rickenbacker Air National Guard Base near Columbus, Ohio and was re-assembled by a team from Warner-Robins Air Logistics Center at Robins AFB, Ga.

“Our wartime mission is aircraft battle damage,” said crew chief Tech. Sgt. Steven Haynom, “and in peacetime, we do crash damage and static displays. We basically help out the civilians at the center.”

The nine-person crew spent four days re-assembling the F-15. The aircraft will remain on Avenue C until it is repainted and construction of two new static display concrete pads is complete.

Then, it will be placed at AEDC's main entrance for public viewing.

According to AEDC Commander Col. David Eichhorn, an F-16 Fighting Falcon is slated to flank the F-15 in the future.

The F-15 was originally part of the 46th Test Squadron at Eglin AFB before it was demilitarized.

According to Sergeant Haynom, aircraft become demilitarized after receiving damage beyond an economical repair cost, and all usable parts are salvaged for active planes. The shell of the aircraft is either shipped to the Air Force boneyard at Davis-Monthan AFB, Ariz., or to museums.

The F-15 joins the F-105 Thunderchief at the main gate and the F-4C Phantom II static display aircraft at gate two, which have been at AEDC since 1987 and 1984, respectively.

For crew member Tech. Sgt. Richard Petty, who grew up in Manchester and graduated from Coffee County Central High School, this was his first visit to



Sergeant Robinson secures the aircraft's left vertical stabilizer. The F-15 Eagle is originally from the 46th Test Squadron at Eglin AFB, before it was demilitarized after receiving damage beyond an economical repair cost. (Photo by Joel Fortner)

Arnold since his father, Dewey Petty, Jr., worked here, retiring in the early 1990s.

“It was very interesting,” Sergeant Petty said after touring the base. “I always wanted to, once I grew up, come back and see what it was like. It was a

little overwhelming actually, some of the things here.”

According to Sergeant Haynom, whose nickname is “Hollywood,” anyone can assemble a display aircraft with the right instruction and tools. “When you're putting (an

aircraft) together for static display, you can make some shortcuts, so we're trimming some edges here and there. But, it's like anything else. You do it enough times; you get the right people, which we have, and it goes together fairly easily.”

The U.S. Air Force's front line fighter makes AEDC permanent home



The F-15 Eagle, which took four days to fully assemble, will remain on Avenue C until it is repainted and construction of two new static display concrete pads is complete. AEDC is slated to receive an F-16 Fighting Falcon static display aircraft in the future. (Photo by Joel Fortner)



The crew uses a large jack to lift the aircraft's wing into place, before bolting it into its final position. (Photo by Joel Fortner)

History of F-15 Eagle testing at AEDC traces back to the 1960s

Compiled by Danette Lee
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During the development phase of the F-15 decades ago, AEDC conducted proposed engine and wind tunnel testing to validate the propulsion system and aerodynamic design for the aircraft.

The center played a critical role in the developmental stage, which required hardware prototyping and head-to-head engineering competition.

This was the first time in Air Force history that two engine contractors, bidding on the same system, had the opportunity to demonstrate performance at AEDC before final engine selection.

Since then, AEDC has performed F100 engine testing every year with the most recent completed in July.

The F100 engine series has undergone a cumulative total of 92 test entries utilizing 17,749.97 test hours in Engine Test Facility Test Cells T-1, T-2, T-4, J-1, J-2, R1-D, C-2 and SL-3. The test programs

supported the Component Improvement Programs, Engine Manufacturing and Development, Altitude Qualification and Initial Service Release Qualification phases.

On June 1, 1981, AEDC completed the longest test of a single engine during a 22-month, 637-hour test program on a Pratt & Whitney F100-PW-200 engine in Test Cell T-2.

Wind tunnel testing at the center validated seven changes to the F-15 airframe, following design modifications made by then F-15 prime contractor, McDonnell Douglas.

The changes included: 1) a more symmetrical radome to enhance radar performance; 2) cowl fences on the upper outboard edge of the engine inlets to improve directional stability; 3) a change in the shape of the cowl lip to further optimize engine/inlet compatibility; 4) shift of the wing and horizontal tail five inches aft to improve aircraft balance and maintain handling qualities and stability; 5) modification of the aft fuselage lines; 6) removal of the ventral fins below the vertical tails; and 7) heightening of the



Since testing of the F-15 first started here, AEDC wind tunnels and test cells have been used to study the basic shape of the aircraft, its ability to carry and deliver external stores, the performance of the variable geometry inlets that feed air to its engines and the performance of the engine itself. (AEDC File photo)

vertical tails.

In addition, AEDC store carriage and separation tests have validated all weapons used on

the F-15.

Decades after the F-15 entered the Air Force inventory, AEDC still supports the F-15 aircraft program through wind tunnel

testing to certify munitions for carriage and release from the aircraft.